

THINGS THAT GO *PO* IN THE NIGHT: THE CLASSIFICATION OF BIRDS, SOUNDS, AND SPIRITS AMONG THE NAGE OF EASTERN INDONESIA

GREGORY FORTH

*Department of Anthropology
University of Alberta
Edmonton, Alberta
Canada T6G 2H4*

ABSTRACT. — As an onomatopoeic name for 'owl', the Nage term *po* forms part of an ethnoornithological classification based primarily on visual criteria. It further denotes a class of nocturnal sounds attributed to owls, other raptorial birds, and certain inanimate objects. All entities able to produce these sounds are considered manifestations of malevolent spiritual beings. The essay explores relations among several classificatory schemes that include *po* and analyses the combination of perceptual and conceptual criteria on which they are based. It thereby addresses questions concerning connections between ethnozoological taxonomy and other classificatory schemes involving animal categories.

RESUMEN. — Como un nombre onomatopéyico para 'buhó,' el término *po* del pueblo nage forma parte de la clasificación etnoornitológica basada principalmente en criterios visuales. Denota, más aun, una clase de sonidos nocturnos atribuidos a buhos, otras aves rapaces y ciertos objetos inanimados. Todas las entidades capaces de producir estos sonidos son consideradas manifestaciones de seres espirituales malévolos. El ensayo explora las relaciones entre varios esquemas clasificatorios que incluyen *po* y analiza la combinación de criterios perceptuales y conceptuales en la cual se basan. De esa manera retoma preguntas acerca de las conexiones entre la taxonomía etnozoológica y otros esquemas clasificatorios que involucran categorías animales.

RÉSUMÉ. — Le terme onomatopéique *po*, qui réfère au 'hibou' en langue nage, fait partie d'une classification ethnoornithologique essentiellement fondée sur des critères visuels. Le même terme dénote en plus une catégorie de sons nocturnes attribués aux hiboux, à d'autres rapaces et à certains objets inanimés. Toutes les entités capables de produire ces sons sont considérées comme des manifestations d'esprits malveillants. Cet article examine les rapports entre les divers systèmes de classification où apparaît *po* et analyse l'association des critères perceptifs et conceptuels formant leur base. Il traite ainsi de questions concernant les rapports entre la taxinomie ethnozoologique et les autres systèmes de classification impliquant des catégories animales.

The Nage, speakers of a Central Malayo-Polynesian language, are a group of about 50,000 cultivators and stock raisers who reside in the central part of the eastern Indonesian island of Flores.¹ Ethnographic and linguistic research conducted by the author indicates that Nage possess some sixty "basic" or "generic" (cf. Berlin, Breedlove, and Raven 1973) terms for birds, the majority of which refer to ornithological species. Only a few of these subsume less inclusive named kinds. One Nage bird name, the onomatopoeic *po*, denotes owls. Other evidence reveals an association of this term with a more inclusive class focused on owls. Yet this

association complicates the status of *po* as an ethno-ornithological taxon, owing to the fact that the Nage term designates not only phenomenal birds but various nocturnal sounds. These sounds are also credited to birds other than owls and to things other than birds, thus defining an essentially mystical set of entities that 'can *po*' (*ngala po*), that is, produce sounds designated as *po*. Things other than birds that Nage describe as making these sounds include the trophy horns of sacrificial buffalo and certain manufactured items of *hebu* wood (*Cassia fistula*). At the same time, Nage believe that the sounds emanate ultimately from malevolent spirits; hence their classification of birds and sounds implicates a classification of spiritual beings.

The aim of the present exercise is to disengage the several referents of *po* and the classificatory domains in which they participate; to determine their perceptual and conceptual bases; and to consider how all these things may be connected. As it relates to birds, the essay bears on continuing debates about the nature of folk classifications of natural kinds, and particularly the issue of how far these are grounded in universal factors of perception and cognition relating to features of morphology and manifest behavior (e.g., Bulmer 1974; Hunn 1976; Atran 1990; Berlin 1992), as opposed to culturally specific considerations of utility (e.g., Hunn 1982; Randall and Hunn 1984; Ellen 1993). Proponents of the former position, sometimes identified as a form of "intellectualism," tend to advance a view of ethnobiological classification as fundamentally similar to modern scientific taxonomy. By contrast, their opponents stress the variety of classificatory forms in which folk categories denoting natural kinds can participate. Some intellectualists allow for the existence of special purpose classifications wherein folk biological taxa are ordered according to criteria that are culturally particular and non-perceptual (e.g., Berlin 1992; Hunn 1977:47). Yet the same authors consider such orderings as separate from and secondary to general purpose classifications, that is, taxonomic schemes grounded in the perception of natural discontinuities of morphology and behavior. Visual traits are most prominent among perceptual factors which intellectualists discern in the construction of folk biological taxa. Even in the case of birds, auditory features—their characteristic vocalizations—tend to be assigned a secondary place in the analysis of local definitions of natural kinds and for purposes of determining perceptual salience, although this tendency has recently been countered by Berlin and O'Neill (1981), who suggest that onomatopoeic names typically form a high proportion of the ethnoornithological nomenclature of small-scale and technologically simple societies (see also Forth 1996a:103).

Uses of the Nage word *po*, one meaning of which is 'owl', support the intellectualist position insofar as the term can be shown to participate in an ethnoornithological classification quite distinct from other semantic domains in which the category is involved (see Forth 1996a). Available evidence moreover indicates that this classification is based primarily on perceptual, and indeed visual, criteria. Such is the case despite the onomatopoeic quality the word *po* shares with numerous other Nage bird names, and in spite of the fact that in other contexts *po* refers directly and exclusively to types of sounds. In this way, the present study illuminates the part played by visual and non-visual percepts in the con-

struction of ethnozoological taxa, in part by contrasting the significance of different sorts of sensory data in different cultural and linguistic domains. Simply to locate *po* among other Nage bird taxa, however, would distort its total meaning. For in addition to operating as a classifier of both birds and sounds, the term defines (though it does not precisely name) a symbolic or spiritual category of *po*-sounding things. Being partly ornithological (insofar as it subsumes bird taxa included in Nage ethnoornithological classification) and partly non-ornithological (since it also subsumes material objects), this third category connects the avifaunal and auditory referents of *po* so as to compose a conceptual unity transcending the boundaries of distinguishable domains.

THE BIRD TERMS

As a reference to birds and sounds respectively, *po* forms two series of compound terms (see Table 1). Although distinguished from non-ornithological uses by the optional inclusion of one of three modifiers, the bird terms nevertheless designate what for Nage is an indivisible ethnoornithological taxon minimally labelled as *po* and glossable as 'owl'. In the sense of 'owl', *po* denotes a category subsumed by a covert grouping of 'birds' which in turn is included in *ana wa*, a Nage term with the general meaning of 'animal' (see Forth 1995).² Intermediate between 'bird' and 'owl' (*po*), one may discern a "covert complex" (Berlin, Boster, and O'Neill 1981:99-100), or unnamed intermediate taxon, which might be glossed as 'night birds'.

Whatever the status of the latter in Nage thought, 'night birds' exists quite separately from a far more clearly circumscribed, although also unnamed, com-

TABLE 1. — Terms incorporating *po*

(a) Terms denoting owls:	
<i>Po koba</i>	'vine <i>po</i> '
<i>Po kua</i>	'eagle <i>po</i> '
<i>Po tadu</i>	'horn(ed) <i>po</i> '
(b) Terms denoting nocturnal sounds:	
<i>Po polo</i>	'witch <i>po</i> '
<i>Po bapu</i>	' <i>bapu</i> (malevolent free spirit) <i>po</i> '
<i>Po tadu bhada</i>	'buffalo horn <i>po</i> '
<i>Po keo</i>	' <i>po</i> that sounds <i>keo</i> '
<i>Po uci</i>	' <i>po</i> that sounds <i>uci</i> ', 'whistling <i>po</i> '
<i>Po ci</i>	' <i>po</i> that sounds <i>ci</i> ', 'hissing <i>po</i> '
<i>Po lobo</i>	'volcano <i>po</i> '

Note on Orthography: Transcription of Nage words is based on standard Indonesian (Bahasa Indonesia). Most consonants are pronounced roughly as in English. The sounds written as /*bh*/ and /*dh*/ are implosives contrasting phonemically with /*b*/ and /*d*/. The /*c*/ (as e.g. in *uci* and *céce*, Table 2) is pronounced as in English /*chin*/. All vowels are pure. The /*é*/ is a long 'e' (see *céce*; cf. English "ail," but with a pure vowel), while /*e*/ represents the schwa between consonants (e.g. *bele teka*, Table 2) and sometimes at the beginning of words (e.g. *ema*, 'father'), and a long 'e' in the final position or in monosyllabic words (e.g. *céce*, *je*, Table 2). Glottal stops are indicated with /' / (see *piko du'a*, Table 2).

TABLE 2. — Birds mentioned in the text with provisional identifications (for orthography see Table 1)

(A) Birds Regarded as Capable of Producing *po* Sounds

Strigiformes:

<i>po</i> (= <i>po koba</i> , <i>po kua</i> , <i>po tadu</i>)	Eared owls, <i>Otus</i> spp. (probably including the Flores Scops-Owl, <i>O. alfredi</i> ; Moluccan Scops-Owl, <i>O. magicus</i> ; and Wallace's Scops-Owl, <i>O. sylvicola</i>) and the Barn Owl, <i>Tyto alba</i>
<i>je</i>	Brown Hawk-Owl, <i>Ninox scutulata</i>

Falconiformes:

<i>bele teka</i>	Large falcons: The Peregrine Falcon, <i>Falco peregrinus</i> or the Australian Hobby, <i>Falco longipennis</i>
<i>iki</i> (or <i>iki titi</i>)	A small falcon: probably the Moluccan Kestrel, <i>Falco moluccensis</i>
<i>jata</i>	Brahminy Kite, <i>Haliastur indus</i>
<i>jata jawa</i>	Larger hawks or goshawks: <i>Accipiter</i> spp. (Also named <i>wole wa</i>)
<i>kua</i> (= <i>kua méze</i>)	Eagles, including the Changeable Hawk-Eagle, <i>Spizaetus cirrhatus</i> and perhaps Bonelli's Eagle, <i>Hieraaetus fasciatus</i>
<i>sizo</i>	A small hawk or goshawk, <i>Accipiter</i> spp., perhaps the Chinese Goshawk, <i>A. soloensis</i> , or Besra, <i>A. virgatus</i>

Other:

<i>ana peti jata</i>	White-headed Munia, <i>Lonchura pallida</i> **
----------------------	--

** Following nomenclature employed by several authors for a fully white-headed Indonesian member of the genus *Lonchura*, I have previously given *ana peti jata* as *Lonchura maja* (Forth 1996a:105). This now appears incorrect. Coates and Bishop (1997:499; Plate 64), who use the name "Pale-headed Munia," list the endemic white-headed Wallacean species as *Lonchura pallida*, as does Verheijen (1963), who employs the English name "White-headed Munia."

(B) 'Witch Birds' in Addition to Falconiformes and Strigiformes

<i>céce</i>	drongo, <i>Dicrurus</i> sp. (probably the Wallacean Drongo, <i>D. densus</i> ; Coates and Bishop 1997:409)
<i>ha</i>	Large-billed Crow, <i>Corvus macrorhynchus</i>
<i>héga hea</i>	Another species of <i>Corvus</i> , smaller than <i>C. macrorhynchus</i> ; probably the endemic Flores Crow, <i>C. florensis</i> (Coates and Bishop 1997:415)
<i>koa ka</i>	Apparently a reference to the <i>héga hea</i> or the Common Koel (see below, regarding <i>toe ou</i>), alternatively named after a nocturnal call of one of these birds

Night Birds Other Than *Po* or Other Witch Birds

<i>leba</i>	Savannah Nightjar, <i>Caprimulgus affinus</i>
<i>piko du'a</i>	A quail (<i>piko</i> , <i>Coturnix</i> sp., probably <i>C. ypsilophora</i>) that calls at night
<i>toe ou</i>	Probably a reference to the Common Koel, <i>Eudynamis scolopacea</i> , otherwise named <i>muta me</i> ; "toe ou" resembles a nocturnal call of this bird (MacKinnon 1991:173)
<i>tute péla</i>	Pied Bush-chat, <i>Saxicola caprata</i> (not a night bird as such, but its nocturnal calling is regarded as an omen.)

plex of birds of the order Falconiformes, or diurnal birds of prey (see Forth 1996a). This is most clearly shown by the evidence of free recall lists, obtained from ten informants, mostly middle-aged or older and comprising eight males and two females, who were asked to give the names of all birds with which they were familiar, in any order they pleased. While listing birds they knew, most people thus mentioned names of Falconiformes — usually four or more in a cluster (see Table 2) — right at the beginning, whereas Strigiformes and other nocturnal birds they generally named much later. Only one of ten Nage listed 'owls' (*po*) in close proximity to names of Falconiformes. In fact, owls and other night birds were often initially overlooked in free recall, and were later named only in response to prompts (e.g., "Do you know any birds that are active at night?"). When talking (and thinking) in a general way about birds, therefore, Nage not only separate Falconiformes from Strigiformes, they also tend to treat the diurnal raptors as the most typical members — a focus or prototype — of the unlabelled life-form taxon of 'bird'. (Other highly salient bird kinds, mostly coinciding with a series of unnamed intermediate groupings, are described in Forth 1996a:96-99, 108.) As night birds, owls are clearly peripheral to this life-form taxon.

This separation of daytime from nighttime birds of prey is important, for as I presently show, in another kind of discourse *po*, understood mostly in a verbal sense and as referring to vocal capabilities, defines a class of birds and other things which includes both nocturnal and diurnal raptors. What is more, while daytime birds of prey are unequivocally central to the category of 'bird', and while night birds, including owls, are peripheral, in this other context, the relation is inverted. It is owls that occupy the more central place.

Also crucial to this contextual contrast is the circumstance that half of the Nage who provided recall lists grouped owls with other night birds that do not belong to the mystical or spiritual category of things believed to produce *po* sounds. Conversely, none of these informants identified eagles, hawks, or falcons as 'night birds', even though diurnal raptors too are reputed to emit nocturnal sounds classified as *po*. Nocturnal kinds which Nage say "do not *po*" (*mona po*) include the Savannah Nightjar (*leba*), the birds named *toe ou*, *koa ka*, and *piko du'a* (see Table 2), and several kinds of bats (which, with qualifications, Nage classify as birds). All this attests to a perceptual, and more specifically visual, basis for Nage ethnoornithological classification, insofar as it indicates that Falconiformes are separated from Strigiformes by virtue of visible, behavioral features, and particularly the fact that they are seen flying during the day. By the same token, by separating night birds from day birds, in their construction of a general classification of avifaunal kinds Nage evidently do not attach significance to a bird's supposed ability to produce *po* sounds.

the three synonymous terms that Nage apply exclusively to owls (listed in Table 1) are *po koba*, *po tadu*, and *po kua*. In each case the second element modifies *po*, which is understood as a substantive. As *koba* means 'creeping or climbing plant, vine', Nage explain this as an allusion to the common sighting of owls perched on or near large forest vines during the daytime. *Po tadu*, 'horn(ed) po', refers to the 'horns', or 'ears', some owls are recognized to possess. According to Nage consultants, the name *po kua* is motivated by the resemblance in plumage

between owls and eagles (*kua*, or *kua méze*), although conceivably other similarities between the two bird kinds might play a part as well.

It is important to stress that these three modifiers refer not to different species of owls, but rather to features of what Nage regard as a single kind. Although there appear to be three or four owl species present in Nage territory, including both eared owls (Strigidae; mostly of the genus *Otus*) and Barn Owls (Tytonidae),³ Nage deny with quite remarkable consistency that the three terms distinguish three distinct owl kinds, describing them instead as alternative names for the same bird which focus on different physical or behavioral features.⁴ While Nage are aware that not all owls possess 'horns', some explain these as possibly a sexual characteristic — speculating that only the males are horned — rather than as a trait marking a separate owl kind. The synonymy of the three names is further indicated by the remark of one man, who referred to owls as *po kua* ('eagle *po*') but immediately added that these are recognized, and distinguished from eagles (*kua*), by their 'horns'.⁵

The term for 'owl', *po* is an onomatopoeic name, replicating a nocturnal vocalization that Nage identify as one of a number of sounds characteristically produced by owls. Owls are counted as one of several birds Nage describe as "saying their own name." Following Jespersen's strict definition of onomatopoeia, *po* can further be characterized as an "...echoic word (which) designates the being that produces the sound" (1921:399; cited in Berlin and O' Neill 1981:239). As is often the case with such names (cf., English "crow" and "cuckoo"), *po* further refers to the sound itself, or rather, in the Nage case, to a series of sounds so classified, and to the act of producing the sound or sounds.

As noted, however, Nage claim that not only owls (*po*) are capable of producing sounds they classify as *po*, since they consider a number of other raptorial birds, and even certain material objects, as capable of doing so as well. With one exception, other birds credited with this ability are diurnal birds of prey. All of these are separately named, and none is designated with a name incorporating the lexeme *po*.⁶ Among these are eagles, the Brahminy Kite, large and small hawks, and two kinds of falcon. The one non-raptorial bird sometimes classified as a *po*-sounder is the White-headed Munia, called *ana peti jata*, or 'Brahminy Kite Munia', so named because its plumage closely resembles that of the rusty-red white-headed Brahminy Kite (*jata*). The inclusion of this little bird among kinds that produce *po* sounds provides one indication of the significance of visual, and morphological, criteria in defining the otherwise auditory category, a matter I take up further below. It is similarly noteworthy that some informants doubted whether the munia can really produce *po* sounds, adducing its small size — thus another visual criterion — as the reason for their scepticism.

Curiously, some Nage were also unsure whether another raptorial bird, and moreover a strigiform, is able "to *po*. This is the *je*, which, judging from local descriptions, is the Brown Hawk-Owl (*Ninox scutulata*). The status of this bird in relation to the category of things that manifest *po* sounds is thus somewhat ambiguous. Nevertheless, the fact that *je*, when mentioned in free recall, was most often listed with *po* provides further evidence that, in this classificatory context, the night birds are grouped primarily on the basis of visual criteria (morphology

and observable behavior) rather than their common membership in the auditorially conceived mystical category.⁷ The *po*-sounding birds, as they may be called, together with provisional scientific identifications, are listed in Table 2.

Since Nage do not normally speak of raptorial birds other than owls as 'kinds of *po*',⁸ when used as a substantive *po* does not unambiguously designate a class of birds, or other entities, that can produce *po* sounds. At the same time, all things thought to emit these sounds can be said to constitute a covert grouping, which is to say, one unnamed by any single lexeme. What is more, for Nage this grouping and the category named *po*, denoting Strigiformes, are conceptually close. As the epitome of things that produce *po* sounds, owls constitute the focus of the unnamed class. Pertinent here is the fact that Nage claim only to have seen owls actually making the sounds. The idea that other birds can do so as well, while maintained with considerable conviction, is therefore not well grounded in experience. As one man expressed the matter, it may simply be an 'inference' or 'interpretation' (Indonesian *tafsiran*).

Insofar as reputed *po*-sounding birds other than Strigiformes are, with one exception, all diurnal raptors, the fact that owls are nevertheless the prototype points to another peculiarity of the unlabeled class. It accords with the inversion mentioned just above, of the normal pattern whereby creatures of the daytime are considered typical and unmarked, while night creatures are atypical and marked. The obvious ground for this pattern is the fact that diurnal creatures are more often seen and therefore far more familiar than are night creatures (cf., Bulmer 1979:67). In the present case, however, the inversion can be understood as confirming the primacy of auditory over visual values in the classification of entities linked with the category *po*.

THE *PO* SOUNDS

The third use of *po* concerns a series of names incorporating this term which designate sounds heard at night (see Table 1, above). Formally speaking, the series is identical to the set of three names that denote birds. However, whereas the latter all refer synonymously to a single ethnoornithological category, the sound terms distinguish several varieties of nocturnal vocalizations. Since all of the named *po* sounds are thought to be made by all of the entities Nage credit with the ability "to *po*," there is no systematic matching of types of *po*-sounding birds with kinds of *po* sounds.⁹

All of the *po* sounds are regarded as portentous, particularly when encountered near habitations. Two of these — *po polo* and *po bapu* — refer more specifically to sounds that manifest different kinds of spiritual beings. *Polo*, the first modifier, means 'witch' and refers to a person believed to operate as a maleficent spirit, attacking human victims by mystical means, typically at night. Although *polo* thus refers to a type of human being as well as to a malevolent spiritual force, witches are distinguished from other humans on specifically spiritual grounds; hence *polo* can be treated as a kind of spiritual being. Also relevant in this connection is the fact that Nage sometimes speak of *po* — referring both to sounds and birds — as a form assumed by the *wa*, the maleficent spirit, of a witch (see Forth 1993a).

The term *bapu*, another modifier of *po*, denotes varieties of malevolent autochthonous free spirits associated with uninhabited places. *Polo* and *bapu* are very closely related concepts in Nage cosmology, in part because some *bapu* spirits are regarded as the source of a witch's powers (see Forth 1998). Nevertheless, the spiritual entities to which the terms refer are distinct. Accordingly, *po* sounds identified with each, though equally inauspicious, are distinguished by different auditory qualities. Sounds identified as *po polo* ('witch *po*') include an uneven number of 'soft' or 'weak' calls. Another manifestation is a call heard coming from the ground at night, just in front of a house or beneath a raised house floor, indicating that a witch is extremely angry at someone living in the house. Such an event is taken to foreshadow certain disaster unless ritual measures are taken to ward off the witch's wrath.

Calls are interpretable as *po polo* by their number. Thus a *po* sound repeated eight times can indicate an imminent theft. An informant from the Keo region, to the south of Nage, stated that *po* repeated four times is a bad omen for one's own group, while five times means that the bad news is for 'other people'. Although consistent with the auspicious and inauspicious significance both Nage and Keo attach to odd and even numbers respectively (see Forth 1993b), this notion appears inconsistent with the Nage representation of *po polo* as comprising an uneven number of cries. The same informant further stated that a harsh call is an omen for men whereas a soft call is ominous for women.

Sounds classed as *po* are not invariably interpreted as omens. In fact, they are heard so often at night that they acquire determinate mystical significance mostly situationally, for example when they are heard unusually close by, or repeatedly, or when they occur in conjunction with other sorts of inauspicious signs or unfavourable circumstances. Describing the auditory phenomenon known as *po uci*, one Nage man suggested that, whereas a combination of *po* and *uci* sounds (which I describe just below) indicate the presence of a witch, *po* sounds heard alone might be nothing more than the nocturnal cry of a bird. More often than not, however, Nage identify *po* sounds as portents that are at least potentially inauspicious. What is more, they usually take them to indicate the presence of a witch (*polo*), even to the extent that *po polo* can be characterized as the prototypical variety of all *po* sounds.

In contrast to *po polo*, Nage describe *po bapu* ('malevolent free spirit *po*') as a loud, penetrating cry that carries far, often taking the form of a series of long, drawn-out or continuous hoots. Occasionally, I recorded *po bapu* as a reference not simply to a sound but directly to a *bapu* spirit, a usage that is fully in accord with a close connection between *po* sounds and malevolent spiritual forces generally. Sometimes Nage further distinguish a particular variant of *po bapu* called *po tadu bhada*, 'buffalo horn *po*'. This refers to a representation of sacrificial water buffalo as embodiments of mountain-dwelling spirits, also classified as *bapu*, which continue to be identified with the trophy horns of slaughtered buffalo (Forth 1989). Nage describe this buffalo horn *po* as a soft, faint noise like a 'puff' or quiet 'pop'. When such a sound is heard, a fowl should be slaughtered and some of its blood smeared on the horns in order to avert illness or other misfortune, as the sound is taken to mean that the trophy horns have not been properly cared for. Nage regu-

larly speak as though the buffalo horn *po* emanates directly from old trophy horns. On the other hand, one informant explained that the sound was more likely produced by a bird calling just outside a building in which horns are stored. This sort of disagreement may indicate that, unlike birds, and especially owls, material objects are marginal to the set of entities that Nage say "can *po*." Nevertheless, one cannot on this ground simply exclude them from the unlabeled grouping, any more than one can distinguish sharply between nocturnal and diurnal birds in this context.

In contrast to the buffalo horn *po*, the other sort of *po bapu* sound — the common or unmarked variety — is often interpreted as a sign that a *bapu* is demanding that a human client reciprocate favors bestowed by the spirit. A particularly famous spirit of this sort inhabits a large boulder called *Ebu 'Egu* (see Forth 1998); hence its auditory manifestation is sometimes specified as *po Ebu 'Egu*. Nage further associate *po* sounds, and more particularly *po bapu*, with the *hebu* (*Cassia fistula*), a hardwood tree possessing an especially powerful *bapu* spirit. Should anyone build a house or field hut close to such a tree, the occupants are likely to be constantly bothered by *po* sounds. Also relevant in this connection is the use of *hebu* wood in the construction of forked sacrificial posts (*peo*), wooden statuary (*ana deo*), and the principal post, or 'hearth post' (*posa lapu*), of special ceremonial buildings, or 'cult houses' (*sa'o waja*). All of the foregoing are items of ritual importance which, if not treated properly, can similarly express their anger by way of *po* sounds.

Also illuminating the common association of objects of *hebu* wood and buffalo horns with the auditory category *po* and the spiritual category *bapu* is the use of forked *hebu* posts (*peo*) for tethering sacrificial buffalo. In addition, wooden statues and house posts of *hebu* are exclusive to cult houses, buildings in which trophy horns are also found. Not surprisingly, therefore, the sound of *po bapu* heard repeatedly near a cult house is thought to reflect the displeasure of a *bapu* spirit — in this context represented as a negative component or aspect of the otherwise tutelary 'house spirit' (*ga'e sa'o*) — caused by the house owners' having allowed the building to fall into disrepair or having transgressed rules of proper use. Nage commentators mostly linked *po bapu* in these circumstances with the *hebu* wood used to construct such a house. Nevertheless, the connection with buffalo horns, which Nage also identify with the guardian spirit of a cult house, is equally germane in this setting.

The association of *po* sounds and buffalo horns may recall the term *po tadu*, 'horn(ed) *po*', as a specific reference to owls. However, neither trophy horns nor sounds called *po bapu* are associated with any particular kind of bird. Rather, buffalo horns, the *hebu* tree, all *po* sounds, and all *po*-sounding birds figure as components of an intricate representation of the two named varieties of malevolent spirits, *bapu* and *polo*. A further idea connecting *bapu* with both buffalo and raptorial birds is the belief that the *bapu* spirits that reside atop the volcano Ebu Lobo assume the guise of a Brahminy Kite (*jata*) or a large, high-flying hawk (*jata jawa*) when searching for human victims, whom they characteristically kill in the form of spirit buffalo. In contrast to the general pattern, in this instance a particular kind of spirit is indeed identified with a particular bird taxon (the diurnal raptors

classified, specifically or generically, as *jata*). Yet in this case it appears significant that the manifestation is not auditory but visual, a contrast to which I return later.

In addition to *po polo* and *po bapu*, Nage recognize two other types of *po* sounds: *po keo* and *po uci*. In these instances the modifiers of *po* are onomatopoeic references to auditory phenomena rather than the names of spirits. Each kind of sound can accordingly be designated simply as *keo* or *uci*. Even so, *po keo* and *po uci* are equally regarded as manifestations of both malevolent spirits (*bapu*) and witches (*polo*). *Po keo* describes a harsh cry reproduced as "*keo, keo*," or as "*ko, ko, ko, ko, ko, keo*." Unlike other *po* sounds, Nage consider this a partly auspicious omen. Heard in the night before the annual hunt (*to'a lako*), *po keo* indicates that wild pigs, or other large game, will be killed on the following day.¹⁰ Although mostly regarded as a simple augury — and a positive one at that—a link between *po keo* and *bapu* spirits is nevertheless discernible in the belief that spirits of *hebu* trees can manifest themselves as wild pigs, as well as in the idea that nature spirits generally are the owners of game animals. This latter belief also helps explain why the *keo* sound is sometimes regarded as auspicious. Although it may manifest potentially harmful free spirits, it does so in a way that reveals the presence of their livestock, which humans wish to appropriate. The cry of *keo* at other times can reveal a witch (*polo*) out hunting for human victims, another notion connecting *po keo*, like other *po* sounds, with spiritual malevolence. In this regard, the auspiciousness of the *keo* sound during the annual hunt might further be attributed to the fact that, on this single occasion, human hunters — sleeping outside in the wild, staying awake until late into the night, and attacking and killing, if not wild spirits, then their livestock — themselves resemble man-hunting witches.

The other major category incorporating *po* and referring to ominous nocturnal sounds is *po uci*. Though *uci* refers to a high-pitched whistle, Nage speculate that the sound may be produced by a bird's wing rather than by vocal means. Placed after *po*, *uci* can be construed either as a modifier or as a term paired with the former, the two words in combination — and in accordance with a dualistic pattern of nomenclature widespread in Nage (Forth 1996b) — referring in a more general way to inauspicious nocturnal sounds. As accords with the second interpretation, *uci* is sometimes heard in combination with vocalizations more specifically classified as *po*, that is, the hoots and other softer calls usually distinguished as *po bapu* or *po polo*.

That the sounds sometimes occur in succession of course suggests that *po* and *uci* derive from the same bird. In one instance, several Nage reported hearing the *uci* sound repeated three times followed by a double cry of *po*. This was heard close to the grave of a man who had died ten days previously, and was counted as one of several indications that he had been killed by a witch. Whether or not the sounds occur in succession, *uci* is attributed to exactly the same birds that give voice to other *po* sounds. Some local interpretations link the sound more closely with diurnal raptors (the Brahminy Kite and eagles being mentioned most often in this connection) than with owls, an association that may seem curious in view of the coupling of the *uci* sound with *po* and the especial, though not exclusive, linking of *po* with owls. One man, for example, said he could not be sure whether

owls could "*uci* as well as *po*," but he was certain that kites, eagles and falcons (*jata*, *kua*, and *iki*; see Table 2) could do so. A possible complementary association may be found in evidence which, although not conclusive, suggests that *po keo* is mostly associated with owls rather than with diurnal birds of prey. Whatever is to be made of this, all Nage regard *uci*, like the *po* sound, as a manifestation of a malevolent being, and most often, if not invariably, of a witch (*polo*).

Further possible distinctions among *po* sounds are signalled with the terms *po ci* and *po lobo*. Some Nage distinguish *po ci*, a reference to a hissing or rasping sound ("chhh" or "shhh") reminiscent of sounds made by the Tytonidae, from the high-pitched whistle they call *uci*. Yet they attribute the same mystical significance to both. People in the Keo region mentioned *po lobo*, roughly 'volcano *po*', as the cry of a night bird that begins as a small, soft voice that gets progressively louder. Although I never encountered this category among Nage, it nevertheless accords with other Nage representations of raptorial birds. For Keo say this *po lobo* manifests a being from the Ebu Lobo volcano out searching for buffalo, which is to say human victims, and thus reveals a spirit of the sort Nage classify as *bapu*.

As the foregoing makes clear, whereas *uci* and *keo* refer to quite specific sounds, *po* denotes a wide variety of bird vocalizations. Yet as an onomatopoeic term, *po* reproduces only particular instances of this class. Thus it may be understood as a synecdoche and a prototype of a more inclusive auditory category, paralleling the prototypical status of owls in relation to the entire class of birds and other things thought capable of producing the *po* sounds. Although, among birds, only owls are unambiguously denoted by *po*, this formal similarity provides an important clue to the association of the onomatopoeic term, and the sounds it designates, with the larger, mystical category of *po*-sounding entities.

As further accords with the special connection between *po* sounds and owls, Nage speak of the sounds (including *uci* and *keo*) as the only calls made by Strigiformes. By contrast, they recognize diurnal birds of prey as producing vocalizations other than ones classified as *po*. Unlike *po* sounds, these cries are normally heard during the daytime. For this reason, and because they are not considered ominous, they do not in themselves connect the birds with malevolent spirits. The Kestrel (*iki*), for example, cries "*ki ki ki ki*," as, following some accounts, does the falcon named *bele teka*, which also emits an ascending "*wiiii*." The term *ie* refers, onomatopoeically, to a call of kites (*jata*), though it further denotes the whinnying of a horse (cf. also *ie wea*, the Hill Myna, *Gracula religiosa*). The high-pitched shriek of eagles (*kua*) sounds something like "*ji ji ji jiii*" according to several informants. In addition, Nage employ a special term, *noi*, to refer to the crying of eagles, but this appears not to be onomatopoeic.

Also worth mentioning in this context is *manu miu*, another auditory category possessing mystical significance. Although *manu* is '(domestic) fowl', most Nage explain the name not as a reference to a physical bird, but to a sound resembling the second person plural (*miu* 'you'). Always heard in the night, the sound is attributed to horses as well as to small birds, kites, and eagles. While I have never heard it associated with owls (*po*), Nage claim that the sound, or what makes the sound, is 'commanded by witches' (*polo watu*). Upon hearing 'you' uttered in the nighttime, therefore, people should at all costs refrain from replying "who are

you?," as this could result in the deaths of the questioners or their kin. Like *po*, then, *manu miu* is a term, partly ornithological in reference, which denotes a dangerous nocturnal sound identified with a malevolent spirit. Yet, unlike *po*, it refers to a vocalization that portends misfortune only when it evokes a particular response. Also, in the majority view, the term does not simultaneously name a physical, or potentially visible, bird.

ANALYSIS

Thus far we have seen how *po* denotes both owls and a series of sounds, at least some of which are imitated by the word. In both contexts, the term can be called onomatopoeic. Yet the first, ornithological sense of the term is distinguished by modifiers which refer not to sound, but to visible features of physical birds (see Table 1 above). On the other hand, sound figures crucially in defining the mystical category of birds and other things that 'can *po*'. As shown, owls — the only birds that Nage straightforwardly designate as *po* — are the most central members of this grouping, just as they are the sole members of the ethnoornithological taxon of the same name. In addition, it is on the whole nocturnal Strigiformes, rather than diurnal Falconiformes, that are more closely associated with the several separately named kinds of *po* sounds as well as with the malevolent spiritual beings considered their ultimate source.

As demonstrated, the central position of owls in all three contexts owes something to auditory experience. Nage claim to have seen Strigiformes emitting *po* sounds, while the idea that other birds can do so is an inference. At the same time, the fact that the sounds are heard at night means that their producers cannot normally be seen; hence their possible attribution to a variety of otherwise visible things, including what westerners would regard as inanimate objects as well as diurnal raptors. What has yet to be considered, however, is why Nage should think that diurnal birds of prey also make sounds empirically attributable only to owls. The answer requires consideration of factors additional to actual vocal properties, that affect the focality of owls within the several classificatory domains in which *po* participates.

While *po* strictly speaking names only owls and sounds, crucial to a proper understanding of its function in defining a wider class of perceptible things is a third term connecting birds, material objects, and auditory phenomena in a way that, for Nage, creates a unitary configuration of meaning. This third term is malevolent spirits. All physical things associated with *po* sounds, whether birds or material objects, are considered by Nage as visible, or potentially visible, manifestations of dangerous spirits. Also, while Nage statements sometimes suggest that the sounds are produced by birds serving as physical media of witches and *bapu* spirits, other evidence indicates a representation in which the sounds, on the one hand, and visible birds and objects, on the other, are equally signs of malevolent anthropomorphic beings which are spiritual and hence essentially invisible.

Consistent with the second interpretation are occasional Nage claims that *po* sounds, inasmuch as they manifest the anger of spiritual beings, are not made by birds at all. Here one is reminded the remark of Feld's Kaluli informant, who as-

serted that what westerners call birds, New Guinean Kaluli regard as ancestral voices (1982:45).¹² The Nage statement might be understood simply as a claim that spirits, not birds, are the ultimate source of the sounds. Yet it also suggests a distinction between sounds whose derivation from the mouths of birds, if not incidental, is of secondary significance, and physical birds that can be conceived non-spiritually. The distinction of course accords with evidence suggesting that Nage conceive of owls and other *po*-sounding birds in two quite separate ways: as components of an ethnoornithological taxonomy based on visible features, and as focal members of an unlabelled mystical grouping defined by auditory phenomena ineluctably associated with — and simultaneously attributed to — malevolent spiritual beings. In this connection, Nage statements regarding *po* bear comparison with remarks by Geddes on the Fijian association of guardian spirits called “*vu*” (possibly cognate with the element *pu* in Nage *bapu*) and a bird called “*kikau*.” The spirit, Geddes claims, “is not considered to be resident in the *kikau* nor even that the *kikau* signals his presence [*sic.*]. It is merely that the sound is identical” (1945:43).

While the mystical class of *po*-sounding entities is defined by sound, and particularly sounds known to be produced by owls, other members, especially daytime birds of prey, are evidently included on the basis not of auditory, but of visual (that is, morphological and behavioral) features, the principal bases of Nage ethnoornithological taxonomy. This is not simply to say that, on objective, empirical grounds, diurnal raptors sufficiently resemble owls to be classed with the onomatopoeically designated nocturnal raptors. For local ideas regarding malevolent spirits appear inextricably bound up in this relationship as well.

Diurnal raptors participate in representations of murderous witches and malevolent *bapu* spirits largely by virtue of their predatory and carnivorous habits combined with their possession of sharp bills and talons. Relevant here is the Nage characterization of all flesh-eating birds — scavengers (e.g., the crows named *ha* and *héga hea*) as well as predators — as *burung suangi*, an Indonesian phrase meaning ‘witch birds’.¹³ Also included in this grouping are the drongo (*céce*) and a bird named *koa ka* (see Table 2 above). While drongos occasionally eat flesh (MacKinnon 1991:250), like the crows both birds are further identifiable with nocturnal witches and spirits by virtue of their dark plumage, and in their different ways both are considered birds of ill-omen.¹⁴ The *koa ka* is moreover known only by its nocturnal cry, while the drongo is especially threatening when it calls after sunset. Clearly, then, the Nage class of ‘witch birds’ is more inclusive than the group of *po*-sounding birds, a category which (with the obvious exception of the White-headed Munia) applies only to predators. On the other hand, non-birds which also ‘can *po*’ are obviously not included among the ‘witch birds’. The relation between ‘witch birds’, nocturnal and diurnal raptors, and other physical entities Nage identify with *po* sounds is illustrated in Figure 1.

While ‘witch birds’ are largely defined by visual features (including plumage and diet), *po*-sounding birds are nevertheless more central to the class than are other kinds. Especially diurnal birds of prey share a definitive behavioral trait with witches, and in a sense with anthropomorphic *bapu* spirits as well. This is their habit of killing and eating other birds, most notably domestic fowls, a char-

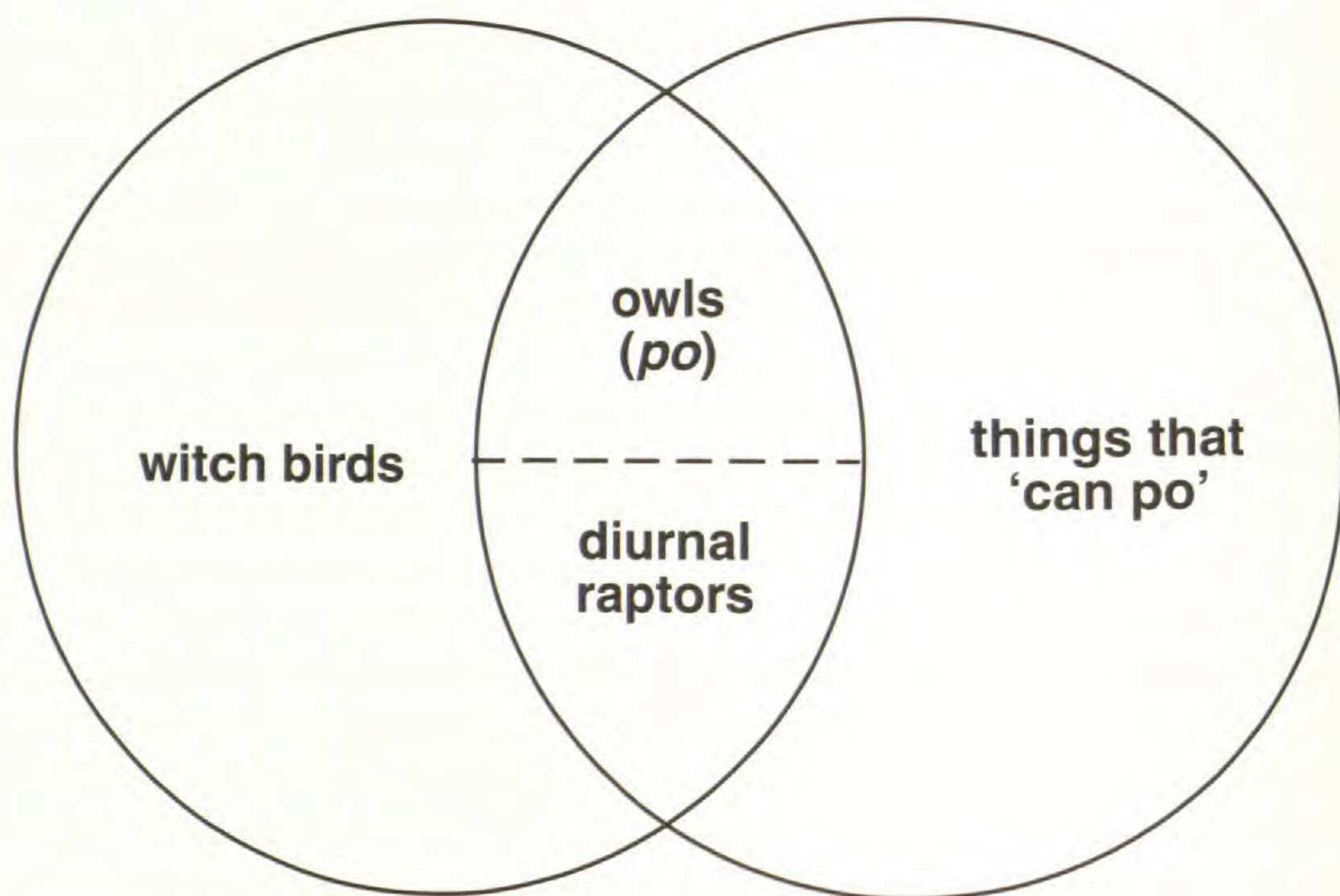


FIGURE 1. — Witch birds and things that produce *po* sounds

acteristic that parallels the anthropophagous proclivities of Nage witches (Forth 1993a). Owls are generally less given to preying on other birds than are Falconiformes. Yet in other respects the nighttime predators are even more closely linked with witches and *bapu* spirits. Apart from their nocturnal habits, owls alone possess visible features which, in Nage thought, associate them with the malevolent anthropomorphic spirits. Relevant here is the ability of witches and *bapu* to manifest themselves as a variety of creatures, and to partake of both human and animal characters. As Nage frequently observe, the round facial discs of the Strigiformes resemble human faces. They also describe the form of the birds' heads, and especially their "ears" (or 'horns'), as lending them the appearance of cats, an evaluation suggesting that they are birds which, rather anomalously, exhibit features of non-birds.¹⁵ Yet another connection is the reputed ability of human witches, in accordance with their generally inverted character, to rotate their heads 180 degrees, just as owls are known to do.

Although owls (*po*) are clearly the prototype of the complex of things associated with the auditory category labelled *po*, the identification of Strigiformes with witches and *bapu* spirits thus appears to derive in considerable measure from visual features. Sharing several of the latter with Strigiformes, diurnal birds of prey are then assumed by Nage to share also in the vocal habits of both owls and maleficent spirits (cf., Lakoff 1987:86, citing Rips 1975). With objects such as buffalo horns and things made of *hebu* wood, the spiritual connection is rather more ideological than perceptual or empirical. Yet it is evidently sufficient to associate these material objects with owls (and hence with other raptorial birds) as things that 'can *po*'. This circumstance moreover confirms how an identification with malevolent spirits provides the common link among all things, birds and non-birds and nocturnal as well as diurnal avifauna, belonging to the class of *po*-sounding entities.

While an identification of *po* sounds with witches and other harmful spirits is crucial to the inclusion of diurnal raptors in the class of *po*-sounding things, there remains the question of the origin of the identification itself. Occasional experience of the sound emanating from physical birds whose form reminds Nage of malevolent spirits would seem an inadequate explanation. An additional factor may therefore be the nature of the sounds themselves, including inherent qualities of eeriness or mystery. In this regard, Nage ideas about *po* may lend support of the thesis of an inextricable link between particular kinds of sound and varieties of experience contributory to the development or maintenance of spiritual or religious representations (see Tuzin 1984). Recalling that spirits the world over tend to be conceived as essentially invisible (or, at least, bound to no particular visible form), also relevant here are the views of Walter Ong concerning the "interiority of sound" and the "exteriority of vision," and the special relation of the former to what Ong calls "the sacral" (1982:71-75).

Although pertaining more to features of language than directly apprehended sound, a resemblance between *po* and *polo* ('witch'), a non-onomatopoeic term with a quite separate derivation (cf. Malay *polong*, meaning 'evil spirit'), may also contribute to an evaluation of *po* sounds as manifestations of spiritual malevolence. Similarly suggestive in this regard is the homonym *po* ('to cut, to be cut down'), which in the idiom *mata po* (*mata* 'to die') specifies a premature death. Not only is this a frequently cited form of retribution by witches and other angry spirits, but an untimely death is also a possible consequence of failed attempts to derive special powers from *bapu* spirits, an alternative outcome of which is transformation into a witch (*polo*). A similar interpretation may apply to *keo*. Although I have no record of comparable senses in Nage, included among meanings of the cognate employed by the neighbouring Ngadha are 'to cut off, through' and 'to determine (fate), prophesy, preordain' (Arndt 1961:238 s.v. *kéco*). Thus, in addition to their inherent qualities, the Nage identification of *po* sounds with witches and other harmful spirits may owe something to their resemblance to human words and voices, particularly as they issue from a nocturnal, invisible — and seemingly disembodied — presence.

CONCLUSIONS

The foregoing discussion supports several conclusions. In the sense of 'owl', Nage *po* figures as a relatively peripheral taxon in an ethnoornithological classification based primarily on visual criteria, of which diurnal raptors are among the most focal members. Conversely, owls are central, and day birds relatively marginal, to the category of *po* understood as a reference to a series of nocturnal sounds and as the defining quality of a spiritual class. Thus when auditory values are valorized over visual ones, the taxonomic precedence of diurnal over nocturnal birds is overturned.

Although owls and other raptors are conjoined as instances of *po*-sounding birds, this obviously does not constitute a discrete ethnoornithological taxon since it is subsumed within a broader spiritual class that further includes *hebu* trees, things fashioned from *hebu* wood, and buffalo horns. By the same token, the seem-

ingly heterogeneous composition of the spiritual category can hardly be adduced in support of the view that folk classifications of natural kinds are radically different from scientific taxonomies or display considerable cultural relativity. Nage do employ an ethnoornithological classification, yet it exists quite separately from the symbolic complex in which *po* figures as a spiritual or mystical category.

While the series of *po* sounds and various entities thought to manifest these sounds are connected by their common link with powerful spirits, spiritual associations play little if any part in Nage ethnoornithological taxonomy. Although several, mostly diurnal birds with dark plumage are identified as 'witch birds', their coincident association in folk ornithology (Forth 1996a: 108) appears to turn on this salient visual feature rather than on any auditory or other similarities (such as dietary habits or nocturnal behavior) that further identify them spiritually. Separating *po*-sounding night birds from *po*-sounding day birds, Nage bird taxonomy is grounded in perceptual criteria that reflect natural discontinuities which are largely independent of culture. In contrast, as ominous manifestations of spiritual malevolence evoking ritual or other responses that in a general sense can be called practical, the class of *po* sounds and the entities with which they are associated are culturally quite specific, and are arguably bound up with utilitarian considerations such as avoidance of illness and other misfortune.

That beliefs regarding which birds produce *po* sounds have no direct bearing on Nage ethnoornithological taxonomy finds further support in the circumstance that, unlike owls, diurnal raptors are not actually named as *po*. Auditory features are implicated in this taxonomy only insofar as several component terms, including of course *po* as the label for 'owl', are onomatopoeic. Yet, in this case at least, onomatopoeia pertains to nomenclature rather than to classification per se. There is a classification of *po* sounds, but this is not at all articulated with a classification of birds. By the same token, birds figure in a class of *po*-sounding entities (as distinct from the class of *po* sounds) only to the extent that owls and other avian kinds are considered as partial, physical manifestations of things that are essentially non-physical, invisible, and, indeed, non-ornithological. These are of course kinds of malevolent spirits. Expressing this another way, one can say that spirits compose an auditorily defined whole of which certain birds form a part. Accordingly, while there are contexts where Nage identify physical birds (such as high-flying hawks) with harmful spirits, it is on the whole the *po* sounds that they regard as their most immediate manifestation. Thus Nage are able to experience nocturnal sounds directly as manifestations of spirits, rather than as cries of owls and other birds rationalized as visible embodiments of these spirits.

In Nage ethnoornithological classification, this part-whole relation between auditory and visual percepts is of course reversed, as indeed it is in western vernacular and scientific nomenclatures where onomatopoeic designations (see for example, "crow," "cuckoo," and indeed "owl") are similarly applied to natural kinds distinguished on non-auditory grounds. Thus in this domain, the auditorily motivated (or onomatopoeic) name *po* figures as the part arbitrarily designating a visible whole, that is, a taxon defined primarily by visual criteria.¹⁶ It is by now well established that "a single term referring to a natural kind, even one whose empirical referents remain partly constant over a variety of contexts, can figure in

more than one classificatory schema" (cf. Forth 1995). *Po* provides a particularly clear example of this general possibility. As the only visible entities actually denoted by *po*, owls form a discrete taxon in a perceptually based folk ornithology while remaining focal to a culturally specific, symbolic complex of "things that go *po* in the night".

NOTES

¹Nage dialects are closely related to those spoken in the Ngadha region, to the west, and in the Ende region, to the east. All languages of central Flores are provisionally classifiable as members of a Bima-Sumba group (Esser 1938), which forms part of Blust's (1980) Central-Malayo-Polynesian branch of the Austronesian languages. In what follows I refer mostly to the dialect spoken in the vicinity of the western Nage village of Bo'a Wae. When I refer to "Indonesian" I mean the Malay-based national language, Bahasa Indonesia.

²There is no single Nage word or phrase denoting birds. When necessary, a class of birds can be distinguished with descriptive phrases such as *ana wa ta'a co zéta lizu* 'animals that fly high in the sky'. Contextually, Nage also refer to birds in general as *ana peti*, a term that specifically denotes small passerine birds. This matter is more fully discussed in Forth 1996a:93-95.

³Following Verheijen (1963, 1967), in western Flores (Manggarai) *po* usually denotes two species of the genus *Otus* (*O. alfredi* and *O. sylvicola*) as well as the Barn Owl (*Tyto alba*). Owing to difficulties of observation, information on owl species in Nage derives mostly from informants' descriptions. Neither preserved specimens, nor detailed illustrations of either nocturnal or diurnal raptors, nor sound recordings of Strigiformes (see Hunn 1992) were available for use in the field.

⁴All three terms correspond to what Berlin, Breedlove, and Raven (1973), in their classification of ethnobiological names, distinguish as primary, analyzable, and unproductive lexemes. In accordance with their synonymy, the terms cannot be considered either productive or secondary lexemes, since none actually names a specific kind of a more inclusive ethnoornithological taxon designated as *po*. By the same token, in Conklin's (1962) scheme, the three terms are identifiable as unitary and complex, rather than as composite lexemes.

⁵Just one Nage man ever spoke of the three terms as referring to bird 'kinds' (Indonesian *jenis*). It is probably significant, moreover, that of all my informants, he had the most formal education and that, when naming birds in free recall, only he spontaneously classified a variety of birds into several generic categories employing national language terms such as *elang* (hawk) and *burung hantu* (owl).

⁶Things may be different in other parts of central Flores. In the Keo region, to the south of Nage, I recorded *po pate* as a reference to a bird of prey that swoops down on domestic fowls and severs (*pate*) their heads with its sharp wing. Although I am unable to provide a secure identification, the description is reminiscent of one or more kinds of falcon (perhaps including the Peregrine, *Falco peregrinus*) that Nage designate as *bele teka* 'sharp wing'. At the same time, the characteristic decapitation was said always to be performed in the night. One Nage man suggested that *po kua* might refer to eagles (*kua*), but this appeared to be little more than a speculation based on a grammatical possibility. All other evidence indicates that *po kua* denotes owls.

⁷Six of ten informants did not mention *je* at all in free recall, though all but one of the six recognized it as a bird name when I questioned them later. Three of the other four listed *je* right after *po*. The name *je* is not onomatopoeic but refers to the bird's reputed habit of stealing up on sleeping prey. In this respect, it is worth noting, the name resembles those of several of the diurnal raptors (e.g. *bele teka*, *jata*, *sizo*, *wole wa*), which similarly refer to morphological or behavioral features (Forth 1996a).

⁸Nage *bhia ko'o* 'kind of', '(to possess the) form of', expresses both class inclusion and resemblance (Forth 1995). Yet to describe a daytime raptor as *bhia ko'o po* could, I was assured, only mean that the bird resembled an owl, either physically or vocally.

⁹In free recall only one informant gave one of the sound terms — *po bapu* — as the name of a bird. This, moreover, he speculatively identified with the *je*, or Hawk-Owl. Given that sounds classified as *po* are probably made exclusively by owls, including indeed the Hawk-Owl, it is not impossible that, through observation, individual Nage have come to link particular sound categories with particular species of Strigiformes. This however is contrary to the general pattern, whereby all *po* sounds are attributed to all (or nearly all) raptorial birds. It is also contradicted by the doubts of some informants about the ability of the *je* to produce any such sound. One particularly knowledgeable informant furthermore claimed that the *je* was mute (*mona sezu*).

¹⁰Being encountered also in western Flores (Manggarai; Verheijen 1950: 67) and in eastern Sumba (Onvlee 1984: 196 s.v. *bhia ko'o*), the idea that night birds, particularly owls, reveal the presence of wild pigs appears to be widespread in eastern Indonesia. In Nage hunting augury, nocturnal cries of two other birds — the Savannah Nightjar (*leba*, *Caprimulgus affinus*) and the Pied Bush-chat (*tute péla*, *Saxicola caprata*) — are on the contrary regarded as portents of an unsuccessful hunt. Neither bird is associated with witches or malevolent spirits, nor with sounds classified as *po*.

¹¹As a parallelism, *po uci* is further elaborated by interposition to become *po ko, uci meci*. Although apparently more characteristic of other dialects, *po ko* was equated by western Nage informants with *po keo* (an identification which suggests that this term too might be construed in terms of this parallelism). On the other hand, *meci*, the paired term of *uci* in the more elaborate expression, denotes a nocturnal — and ventriloquistic — sound attributed to a cricket named by the same term. With regard to regional variations, it should also be noted that an informant from northeastern Nage stated that *po kusi* (= western Nage *po uci*) and *po ko* could be distinguished as auditory manifestations of the anger of ancestors and of witches respectively. This distinction introduces a contrast not found among ideas regarding *po* in western Nage, where the category is not linked with ancestral spirits or the dead. A Keo informant claimed that *ko* denoted an owl smaller than owls named *po* but possessing larger eyes. The same man, however, later described *po*, *ko*, and *uci* as references only of different sounds produced by the same birds.

¹²While Feld's analysis of Kaluli knowledge of birds is illuminating in regard to some Nage conceptions of *po*, on the whole he appears to consider visible birds as manifestations of spiritually derived sound in all epistemological contexts. In contrast, the Nage evidence suggests the existence of a distinct ethnoornithological domain in which spiritual associations and auditory capabilities are mostly irrelevant.

¹³In standard Indonesian, by contrast, both *burung suangi* and the synonymous *burung hantu* ('spirit bird') refer specifically to owls. The association of owls with witches and spirits is

of course extremely widespread. In European traditions, the connection is reflected, for example, by Latin morphemes from which are derived the scientific names Strigidae and Strigiformes (see e.g., *striga*, "an evil spirit supposed to howl in the night" (Glares 1982:1828), "a woman that brings harm to children, a hag, a witch" (Andrews 1907:1766), and *strix*, "a kind of owl, regarded as a bird of ill omen, sometimes as a vampire or evil spirit" (Glares 1982:1829).

¹⁴Also noteworthy in this connection is the belief that crows visibly manifest harmful spirits called *noa* which inflict disease on large livestock and later feed on the carcasses of their victims. The flesh of birds that Nage classify as 'witch birds', raptors and scavengers alike, is generally prohibited as food.

¹⁵This particular observation is reminiscent of the views of Douglas (1966) and Leach (1964), who argue that special ritual significance is attached to animals that are anomalous in relation to a pre-conceived, and largely visually and morphologically defined, categorization of life-forms. For the most part, however, the present analysis accords with Hunn's critique of Douglas's interpretation of the abominations of Leviticus. After demonstrating how 18 or 19 of the 20 birds proscribed as food in Leviticus are meat or fish eaters, Hunn argues that they are forbidden precisely because of their feeding habits, and not because they are somehow anomalous in relation to the category 'bird' (1979:111). Since the majority of these kinds mentioned in Leviticus are Falconiformes and Strigiformes, the group closely corresponds with the complex of birds to which Nage attribute *po* sounds, and even more closely to the larger group of Nage 'witch birds'. As remarked in the previous note, raptors and other 'witch birds' are forbidden as food among Nage as well.

¹⁶In support of possible connections between taxonomy and visually-based literate culture, Ong (1977:139) points out that English "species" derives from Latin *specio*, meaning "to look at, behold." Contrary to Ong, however, the evidence of the present paper suggests that taxonomic ordering of natural kinds may be based primarily on visual criteria in oral cultures as well.

ACKNOWLEDGEMENTS

This essay is based on a paper read at the 17th Annual Conference of the Society of Ethnobiology held in Victoria, British Columbia, 16-19 March 1994. Information on Nage ethnoornithological classification was collected during several visits to Flores beginning in 1984, as part of a general ethnographic study focused on matters of indigenous cosmology, ritual, and social organization. Research in the Nage region was sponsored by the Indonesian Institute of Sciences (LIPI), the National Institute for Cultural Research (LRKN), and Nusa Cendana University. Financial support was provided at various times by the British Academy, the Central Research Fund of the University of Alberta, and the Social Sciences and Humanities Research Council of Canada. I am grateful to all of these bodies for their assistance.

LITERATURE CITED

- ANDREWS, E. A. (editor). 1907. Harper's Latin Dictionary. American Book Company, New York and Cincinnati, Ohio.
- ARNDT, PAUL. 1961. Wörterbuch der Ngadhasprache. Studia Instituti Anthropos 15. Suisse: Anthropos-Institut, Fribourg, Germany.
- ATRAN, SCOTT. 1990. Cognitive Foundations of Natural History. Cambridge University Press, Cambridge.
- BERLIN, BRENT. 1992. Ethnobiological Classification: Principles of Categorization of Plants and Animals in Traditional Societies. Princeton University Press, Princeton, New Jersey.
- BERLIN, BRENT, J. BOSTER, and J. O'NEILL. 1981. The perceptual bases of ethnobiological classification: Evidence from Aguaruna folk ornithology. *Journal of Ethnobiology* 1:95-108.
- BERLIN, BRENT, D. E. BREEDLOVE, and P. H. RAVEN. 1973. General principles of classification and nomenclature in folk biology. *American Anthropologist* 75:214-242.
- BERLIN, BRENT and J. O'NEILL. 1981. The pervasiveness of onomatopoeia in Aguaruna and Huambisa bird names. *Journal of Ethnobiology* 1: 238-261.
- BLUST, ROBERT. 1980. Early Austronesian social organization: The evidence of language. *Current Anthropology* 21 (2):205-247.
- BULMER, RALPH. 1974. Folk biology in the New Guinea Highlands. *Social Science Information* 8:9-28.
- . 1979. Mystical and mundane in Kalam classification of birds. Pp. 57-79 in *Classifications in Their Social Context*. Roy F. Ellen and David Reason (editors). Academic Press, London.
- COATES, BRIAN J. and K. DAVID BISHOP. 1997. A Guide to the Birds of Wallacea: Sulawesi, the Moluccas and Lesser Sunda Islands, Indonesia. Dove Publications, Alderley, Australia.
- CONKLIN, HAROLD C. 1962. The lexicographical treatment of folk taxonomies. *International Journal of American Linguistics* 28(2):119-141.
- DOUGLAS, MARY. 1966. Purity and Danger: An Analysis of Concepts of Pollution and Taboo. Routledge & Kegan Paul, London.
- ELLEN, ROY. 1993. The Cultural Relations of Classification: An Analysis of Nuaulu Animal Categories from Central Seram. Cambridge University Press, Cambridge.
- ESSER, S. J. 1938. Talen. Blad 9b in *Atlas van Tropisch Nederland*. Martinus Nijhoff, 's-Gravenhage, The Netherlands.
- FELD, STEPHEN. 1982. Sound and Sentiment: Birds, Weeping, Poetics, and Song in Kaluli Expression. University of Pennsylvania Press, Philadelphia.
- FORTH, GREGORY. 1989. The *pa sése* festival of the Nage of Bo'a Wae (central Flores). Pp. 502-519 in *Rituals and Socio-cosmic Order in Eastern Indonesian Societies*. Cécile Barraud and Jos Platenkamp (editors). Special issue of *Bijdragen tot de Taal-, Land-en Volkenkunde* 145.
- . 1993a. Social and symbolic aspects of the witch among the Nage of eastern Indonesia. Pp. 99-122 in *Understanding Witchcraft and Sorcery in Southeast Asia*. C. W. Watson and Roy Ellen (editors). University of Hawaii Press, Honolulu, Hawai'i.
- . 1993b. Ritual and ideology in Nage mortuary culture. *Southeast Asian Journal of Social Science* 21(2):37-61.
- . 1995. Ethnozoological classification and classificatory language among the Nage of eastern Indonesia. *Journal of Ethnobiology* 15(1):45-69.
- . 1996a. Nage birds: Issues in the analysis of ethnoornithological classification. *Anthropos* 91:89-109.
- . 1996b. To chat in pairs: Lexical pairing as a pervasive feature of Nage mundane speech. *Canberra Anthropology* 19(1):31-51.
- . 1998. Beneath the Volcano: Religion, Cosmology and Spirit Classification among the Nage of Eastern Indonesia. (Verhandelingen No. 177) Royal Institute of Linguistics and Anthropology, Leiden.

- GEDDES, W. R. 1945. Deuba: A Study of a Fijian Village. (Memoirs of the Polynesian Society, Vol. 22.) The Polynesian Society, Wellington, New Zealand.
- GLARES, P.G.N. (editor). 1982. Oxford Latin Dictionary, Combined Edition. Clarendon Press, Oxford.
- HUNN, EUGENE S. 1976. Toward a perceptual model of folk biological classification. *American Ethnologist* 3:508-524.
- . 1977. Tzeltal Folk Zoology: The Classification of Discontinuities in Nature. Academic Press, New York.
- . 1979. The abominations of Leviticus revisited: A commentary on anomaly in symbolic anthropology. Pp. 103-116 in *Classifications in Their Social Context*. Roy F. Ellen and David Reason (editors). Academic Press, London.
- . 1982. The utilitarian factor in folk biological classification. *American Anthropologist* 84:830-847.
- . 1992. The use of sound recordings as voucher specimens and stimulus materials in ethnozoological research. *Journal of Ethnobiology* 12(2):187-198.
- JESPERSEN, OTTO. 1921. *Language: Its Nature, Development, and Origin*. Allen and Unwin, London.
- LAKOFF, GEORGE. 1987. *Women, Fire and Dangerous Things: What Categories Reveal About the Mind*. University of Chicago Press, Chicago.
- LEACH, EDMUND. 1964. Anthropological aspects of language: Animal categories and verbal abuse. Pp. 23-63 in *New Directions in the Study of Language*. Eric H. Lenneberg (editor). MIT Press, Cambridge, Massachusetts.
- MACKINNON, JOHN. 1991. *Field Guide to the Birds of Java and Bali*. Gadjah Mada University Press, Yogyakarta, Indonesia.
- ONG, WALTER J. 1977. *Interfaces of the Word: Studies in the Evolution of Consciousness and Culture*. Cornell University Press, Ithaca, New York, and London.
- . 1982. *Orality and Literacy: The Technologizing of the Word*. Methuen, London and New York.
- ONVLEE, L. 1984. *Kamberaas (Oost-Soembaas)-Nederlands Woordenboek*. Foris Publications, Dordrecht, The Netherlands.
- RANDALL, ROBERT and EUGENE S. HUNN. 1984. Do life forms evolve or do uses for life? *American Ethnologist* 11:329-349.
- RIPS, LANCE J. 1975. Inductive judgements about natural categories. *Journal of Verbal Learning and Verbal Behavior* 14:665-681.
- TUZIN, DONALD. 1984. Miraculous voices: The auditory experience of numinous objects. *Current Anthropology* 25(5):579-596.
- VERHEIJEN, JILIS A. J. 1950. De stem der dieren in de Manggaraise folklore. *Bijdragen tot de Taal-, Land- en Volkenkunde* 106:55-78.
- . 1963. Bird names in Manggarai, Flores, Indonesia. *Anthropos* 58:677-718.
- . 1967. *Kamus Manggarai. I: Manggarai-Indonesia*. Martinus Nijhoff, 's-Gravenhage, The Netherlands.